

2014-15 2nd semester

TA workshop

TA management

Dr. Kenneth Wong (kykwong@cs.hku.hk)

OBL working Group

Siu Ming Yiu

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Moodle support

Technical Support

Daniel Hung (hfhung@cs.hku.hk)

News in 2014-15 2nd semester

The following courses have to implement OBL

	Assessment	Contact point
Undergraduate courses		Judy (judyli@cs.hku.hk)
Research postgraduate courses (COMP8XXX, COMP9XXXX)	TA fill in data in the OBL system https://intranet.cs.hku.hk/obl2/	Priscilla (pchung@cs.hku.hk)
Taught postgraduate courses (MSc courses)	System not ready yet, we will send you a report template (docx file).	Ellen (ellen@ecom-icom.hku.hk)

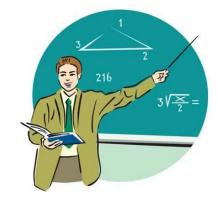
- Faculty has set new standard for us to follow
 - UG courses 70% of students attaining grade D (50% marks) or above
 - TPg courses 70% of students attaining grade C (59% marks) or above

4 things to do...



- [Before the start of the semester] Please contact your course instructor and meet with him/her.
 - Please tell your instructor about the time you will not be available
 (E.g., attending conferences, rushing for conference submissions ...etc)
- [One week before the first lesson] Please set up Moodle page for your course, make it available to students.
 - You can either set up the Moodle page from scratch (follow the material "Setting up Moodle"), or import the old Moodle course (if any) to the current one.
 - Please contact Kit (ckchui@cs.hku.hk) or Daniel (hfhung@cs.hku.hk) if you have any questions w.r.t. Moodle.

4 things to do...



- [During the semester]
 - Tutorial class visit We will setup a team consisting of professors and TAs to attend your tutorials/workshops and help you improve your presentation skill.
 - Return assignment within 2 weeks after the deadline (University requirement).
- [Throughout the semester] HKUCS's OBL implementation



- Please help the instructor to prepare for an OBL assessment report (to be submitted to HKIE accreditation 2015 and HKU Internal QAC audit).
- Submit necessary data + sample to the OBL system.

OBL

OBL working Group

Siu Ming Yiu

Chui Chun Kit (ckchui@cs.hku.hk)

Work to do in 2014-15



- HKIE will evaluate our BEng(CompSc) programs using OBL standards in 2015.
- We received new HKIE Accreditation Handbook for Computer Science and discussed with DCDC
 - [Need your input] We need you to enter the questions/solution + mark distribution of the question + student sample submissions to the OBL system.

10 new CS Programme outcomes

- Our current CS programme has 10 programme outcomes (PO).
 - **a.** An ability to apply knowledge of computing and mathematics appropriate to the programme outcomes and to the discipline
 - ... (in appendix)

CS courses

Course-specific outcomes

- Each course has more than one course learning outcomes (CLO).
- Each CLO is related to one or more POs.
 - T teaching
 - P practice
 - 🌒 M measure

Please find the course learning outcomes of your course

https://intranet.cs.hku.hk/obl2/

CS programme outcomes



E.g., in Database course COMP3278:

	I							
4 course		PO a	PO b	PO c	PO d	PO e	PO f	PO g
learning	CLO1	T,P,M	T,P	T,P				
outcomes of	CLO2		T,P,M	T,P				
	CLO3			T,P	T,P,M			
COMP3278	CLO4					T,P,M		
1								

CLO and PO mapping in COMP3278



E.g., CLO 1 [Information Modeling] Able to understand the modeling of real-life information in a database system. (Related to PO *a* "Problem solving")

CS courses

Course-specific outcomes

Assessment of outcomes

- If there is a "M" in the CLO v.s.
 PO mapping, we need to
 measure the CLO (i.e., see if
 students achieve the CLO well,
 provide supporting evidence.)
- Course instructor has decided the "T,P" of the CLO, OBL working group will decide the "M".

CS programme outcomes

4 course learning outcomes of COMP3278

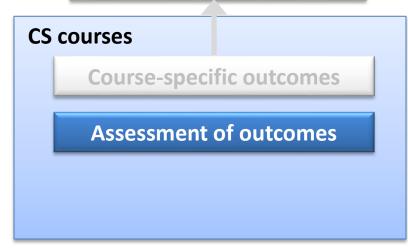
	PO a	PO b	PO c	PO d	PO e	PO f	PO g
CLO1	T,P,M	T,P	T,P				
CLO2		T,P,M	T,P				
CLO3			T,P	T,P,M			
CLO4					T,P,M		

CLO and PO mapping in COMP3278

If there is a "M" that mean we need to measure if the CLO is achieved well...



10 new CS Programme outcomes



Questions in assignment:

Selected to assess CLO1

Q1. Draw ER Diagram for the following application...

Selected to assess CLO2

Q2. Give the SQL ...

- That's why we need input from courses in the <u>assessment</u> of the CLOs
- What question(s) the instructor has used to assess each CLO in your course.
- For each selected question, provide:
 - The question + sample solution
 - Mark distribution (in excel file)
 - 2 sample submissions from top, middle, bottom performers (requested by the Faculty)

4 course learning outcomes of COMP3278

Colocted		CLO1	CLO2	CLO3	CLO4
Selected	Task 1				
assignment /	Task 2				
quiz / exam	Task 3				
question	Task 4				

Assessment and CLO in COMP3278





CLO₁

CLO₂

CLO₃

CLO₄

4 course

learning

outcomes of-

COMP3278

How well is your program in delivering **Program** outcome a? Please provide evidence.

- Our answer: PO a is Taught (T) and Practiced (P) in the courses COMP3278, COMP2123, ...etc
- COMP3278 is one of the course(s) used to measure (M) the PO.
 - CLO1, is used to measure(M) POa.
 - Task 1 is used in the assessment of CLO1

T,P,M

The performance (mark distribution and sample) of students in Task 1 are

CS programme outcomes

PO a PO b PO c PO d PO e PO f PO g
T,P,M T,P T,P T,P,M T,P T,P,M T,P T,P,M T,P T,P,M

Selected
assignment /
quiz / exam
question

CLO1 CLO2 CLO3 CLO4

Task 1

Task 2

Task 3

Task 4

4 course learning outcomes of COMP3278

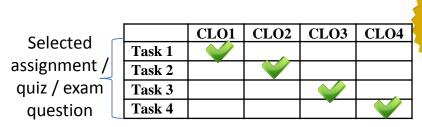
CLO and PO mapping in COMP3278

Assessment and CLO in COMP3278

Minimum effort

Please find the course learning outcomes of your course

https://intranet.cs.hku.hk/obl2/



Assessment and CLO in COMPXXXX

ONLY ONE

representative
question in your
course to assess ONE
Course Learning
Outcome.



HKIE outcomes

limitations.

An ability to apply knowledge of computing and mathematics appropriate to the programme outcomes and to the a discipline An ability to apply knowledge of a computing specialisation, and domain knowledge appropriate for the computing b specialisation to the abstraction and conceptualisation of computing models An ability to analyse a problem, and identify and define the computing requirements appropriate to its solution An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet d desired needs with appropriate consideration for public health and safety, social and environmental considerations An ability to function effectively on teams to accomplish a common goal е An understanding of professional, ethical, legal, security and social issues and responsibilities An ability to communicate effectively with a range of audiences. g An ability to analyse the local and global impact of computing on individuals, organisations, and society h Recognition of the need for and an ability to engage in continuing professional development An ability to use current techniques, skills, and tools necessary for computing practice with an understanding of the

Current POs of our CS programme

a	Analyze a problem; think critically on both technical and non-technical issues; and identify and define the computing requirements appropriate to its solution
b	Apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices
С	Apply design and development principles in the construction of software systems of varying complexity
d	Implement and evaluate a computer-based system, process, component, or program to meet the desired needs
е	Communicate both orally and in writing to a variety of audiences; and to function effectively in multi-disciplinary
	teams by exercising leadership and contributing as a member
£	Continue professional development with an understanding of ethical and professional issues; and to critically
	analyze the impact of computing in the global and societal context
g	Engage in lifelong learning by independently and continually expanding knowledge and abilities

OBL system

Thank you Daniel for implementing the OBL data collection and analysis system for us. https://intranet.cs.hku.hk/obl2/

Course list page: After login, instructors can see a list of their courses in each academic year.

ASSess	sment Repor	t : Course L	.IST					
□ C□ S	Academic year: 2013-14 ▼ Course No:							
	, , ,							
Item 1	10 of 115	Next 10						
	Course No	Semester	Subclass	Course Name	Credit			
View	CCHU9025	2	Α	Creativity, Technology and Law	6			
View	CCST9029	1	Α	Cyberspace Crime: Technology and Ethics	6			
View	CCST9047	1	Α	The Age of Big Data	6			
View	COMP1117	1	А	Computer Programming (ActSc, BSc, Minor & 2nd Major)	6			

OBL system

Course assessment report

- Part 1. Matrix of programme outcomes and course learning outcomes
- Part 2. Detail assessment activities.

Assessment Report : Detail

- 1. Academic Year: 2013-14
- 2. Course Code: COMP1117A
- 3. Moodle Course Code:
- 4. Course Name: Computer Programming (ActSc, BSc, Minor & 2nd Major)
- Prepared By: Dr. Tester
- 6. Prepared Date: 2014-02-02
- 7. Are all course learning outcomes covered by some assessment activities? N
- Based on the assessment result, do you have any suggessions to the course learning outcomes? (E.g., revising the current outcomes, or adding new learning outcomes)

Edit Return to Course List

- Matrix of Programme Outcomes and Course Learning Outcomes
- Assessment Activities



Part 1. Course Learning Outcome and CS Programme outcomes (e.g., CLO 1 is teaching, practicing and measuring to PO 1)

CS Programme Outcomes

	CS Programme Outcomes
PO 1	An ability to apply knowledge of computing and mathematics appropriate to the programme outcomes and to the discipline
PO 2	An ability to apply knowledge of a computing specialisation, and domain knowledge appropriate for the computing specialisation to the abstraction and conceptualisation of computing models
PO 3	An ability to analyse a problem, and identify and define the computing requirements appropriate to its solution
PO 4	An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs with appropriate consideration for public health and safety, social and environmental considerations
PO 5	An ability to function effectively on teams to accomplish a common goal
PO 6	An understanding of professional, ethical, legal, security and social issues and responsibilities
PO 7	An ability to communicate effectively with a range of audiences
PO 8	An ability to analyse the local and global impact of computing on individuals, organisations, and society
PO 9	Recognition of the need for and an ability to engage in continuing professional development
PO 10	An ability to use current techniques, skills, and tools necessary for computing practice with an understanding of the limitations

Course Learning Outcomes

	Course Learning Outcomes
CLO1	[Computational mind] Able to identify possible solutions for problems based on computer programs.
CLO2	[Program implementation] Able to implement solutions for problems using C++.
CLO3	[Program comprehension] Able to understand programs written by others and participate in larger scale system implementation.

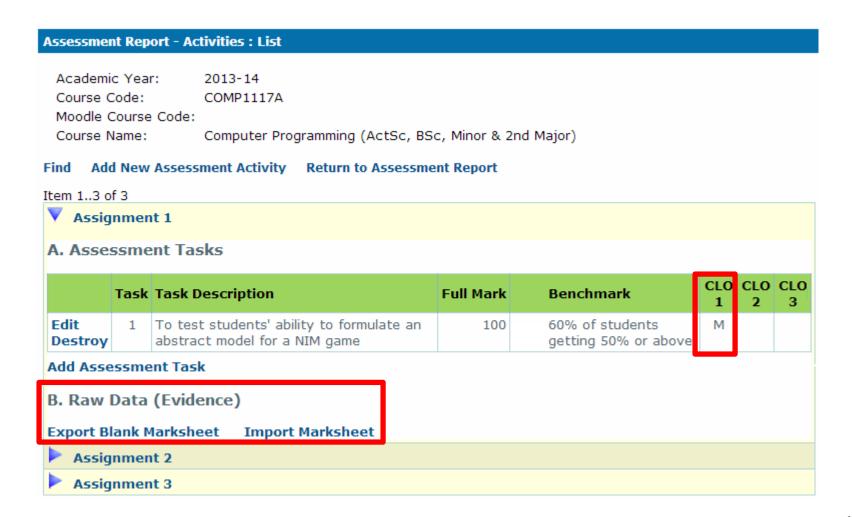
Course Learning Outcomes and CS Programme Outcomes

	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	
CLO1	T,P,M	Т									Edit
CLO2			T,P,M							16	Edit
CLO3				Т	T,M					10	Edit



Part 2. Assessment activities (e.g., Assignment 1)

Step 1. Add in assessment tasks (e.g., question 1 is used to assess CLO 1, success benchmark will be set by instructor)





Part 2. Assessment activities



Step 2. Download marksheet of the assessment task, fill in the student's scores and upload to the system.

Assessment Report - Activities - Marksheet : Upload

Academic Year: 2013-14
Course Code: COMP1117A

Moodle Course Code:

Course Name: Computer Programming (ActSc, BSc, Minor & 2nd Major)

Activity No: 1

Activity Name: Assignment 1

Marksheet File:

選擇檔案 2013_COMP1..._ACT1.xlsx

Academic Year: 2013-14

Course Code: COMP1117A

Assessment Report - Activities - Marksheet : Uploaded

Moodle Course Code:

Course Name: Computer Programming (ActSc, BSc, Minor & 2nd Major)

Upload | Cancel Upload

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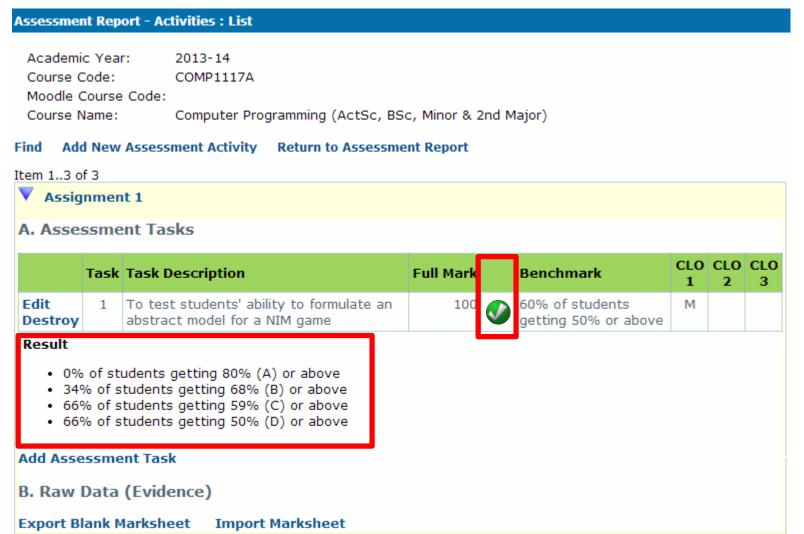
Save Marksheet Do Not Save Marksheet

Student No.	Task 1
2010860068	60.0
2012518803	50.0
2012551219	78.0
2012561563	60.0
2012574041	50.0
3035027679	78.0
3035027980	60.0
3035028166	50.0
3035028233	78.0
3035028362	60.0
3035028568	50.0



Part 2. Assessment activities

Step 3. The system checks if the benchmark is achieved. (Instructors can look at the "Result" part to see the students' performance, and adjust the benchmark accordingly.)





Generate report by Programme Outcome

- Answer questions like: How well is our students achieving programme outcome \boldsymbol{a} ?
- Aggregate summary will be provided
 - Outcome **a** is taught in 12 courses.
 - Outcome **a** is measured in 5 courses, 10 assessment tasks.
 - Outcome α is achieved in 9/10 assessment tasks (drill into the detail of each task)

Academic year: 2013-14 ▼ Find Report by CS Programme Outcome Return to Main Menu PO 1 analyze a problem; think critically on both technical and non-technical issues; and identify and define the computing requirements appropriate to its solution

Courses related to PO 1

Course: COMP1117A Computer Programming (ActSc, BSc, Minor & 2nd Major)

Cour	se Learning Outcome	Assessment	Result / Sample
COL1	[Computational mind] Able to identify possible solutions for problems based on computer programs.	Assessment activity 1 Task 1 To test students' ability to formulate an abstract model for a NIM game Result • 0% of students getting 80% (A) or above • 34% of students getting 68% (B) or above • 66% of students getting 59% (C) or above • 66% of students getting 50% (D) or above	

Course: COMP2119A Introduction to Data Structures and Algorithms (BBAIS, Minor & 2nd Major)

End





Department of Computer Science, The University of Hong Kong